February 1961

Dear Bruce:

Thank you for your letter of 30 January and the spliced film which arrived separately.

We have not yet subjected the sample splices to a critical evaluation and I don't think we will be able to do so for another three weeks. We will certainly advise you of the results of our tests as soon as they are completed.

If you must proceed in the near future, our present feeling is that the following are the desirable splice characteristics for

- 1. Physical lengthwise alignment is important because it it not desirable to introduce alignment transient errors (within about 0.005 inches/foot angular error);
- 2. As much flexibility as can be achieved in the splice is desired, but the diplice must be sufficiently strong to withstand the forces we will put on it (normal operation tension will be about three pounds, but a safety factor must be applied, of course); and
- 3. Ability to withstand many flexes is important since we will subject the film to many bands.

In all likelihood, your recommendation would be satisfactory but. if our requirements are a little bit unusual, a nonstandard splice might be most favorable.

MDR: mb

CC: L.E.W.